REMARKS

In the Official Action mailed on **11 October 2007**, the Examiner reviewed claims 1-6 and 14-17. Claims 1-6 and 14-17 were rejected under 35 U.S.C. § 112. Claims 1-6, and 14-17 were rejected under 35 U.S.C. § 103(a) based on Parham et al. (USPN 6,879,564 hereinafter "Parham"), and Bertin et al. (USPN 5,940,372 hereinafter "Bertin").

Rejections under 35 U.S.C. §112

Claims 1-6 and 14-17 are rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

Applicant has amended claims 1, 4-6, and 14 to delete the term "efficient" in the claim language. This finds support on page 1, lines 13-14 and in the original claim 1, etc. of the instant application. Applicant respectfully submits that the amended claim language is not subjective, and can be given patentable weight since it refers to the definite concept of communication between network nodes.

Applicant has amended claims 5-6 to replace the term "best path weight" with the term "least path weight". This finds support in page 7, lines 1-25 of the instant application. Applicant respectfully submits that the amended claim language is not ambiguous, and hence not subjective.

Applicant respectfully submits that these amendments overcome the rejections under 35 U.S.C. § 112, second paragraph.

Rejections under 35 U.S.C. § 103(a)

Claims 1-6, 11, 13, 14-17, 22 and 24 are rejected under 35 U. S. C. § 103(a) as being unpatentable over Parham in view of Bertin. Applicant respectfully disagrees, and submits that Bertin and the present invention disclose

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different approaches for determining the zone weights from which the optimal path weights are determined, and which enable further routing decisions to be made in the network.

Applicant would like to thank the examiner for pointing out that the features upon which the Applicant relies to distinguish the present invention from Bertin (i.e., calculating the number of routing paths, wherein the zone weight is independent of network traffic) are not in the recited claims. Applicant has amended claims independent claims 1, 4-6, and 14 to clarify that the term "path" describes **a possible routing path in the network**, and that the zone weight at each fault zone is an **indicator of the number of possible routing paths** that will traverse that fault zone and **enables routing decisions independent of network traffic** (see page 1, lines 17-26 and page 7, 1-25 of the instant application).

Applicant respectfully reiterates the argument made in the previous office action distinguishing the present invention from Bertin:

Applicant respectfully submits that Bertin discloses selecting paths by weighing each transmission link with a weighing function **that is dependent on reserved and non-reserved network traffic**, and selecting an optimal path that selects links with the lowest weight (see col. 6, lines 28-45 of Bertin). Thus, the weight disclosed in Bertin is a **measure of the network congestion**, both ongoing congestion as well as potential congestion (based on the reserved bandwidth). If there is no reserved bandwidth, then the weight is a measure purely of the current network traffic characteristics.

In contrast, the present invention teaches a weight function at a fault zone that **calculates the number of routing paths** that go through the fault zone (see page 6, lines 3-26 to page 7, lines 1-25 of the specification). This is **independent of the network traffic** at any given instant, since it particularly identifies the **potential load on various nodes as a result of the particular network path configuration.**

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This is beneficial because this measure can identify those nodes that **may get overloaded** purely as a result of the particular network configuration chosen, such as a node that is a bottleneck in the communication between two opposite parts of the network because all routing paths between the two parts of the network go through this node. *Irrespective of the current traffic characteristics,* failure of that node can affect the communication in the network significantly. Note that while network traffic congestion statistics can give a good measure of the currently overloaded nodes such as described above, the measure taught in the present invention enables us **to predict this merely from the network path configuration in a topology database at a node, rather than using the current or potential traffic characteristics across the network.**

Applicant respectfully points out that there is nothing within the combined system of Parham and Bertin, either explicit or implicit, which suggests the use of the topology information to determine the number of routing paths that pass through a fault zone. It is not possible to use the combined system of Parham and Bertin to **predict the possible load at a node** prior to the onset of actual network traffic.

Accordingly Applicant has amended the independent claims 1, 4-6, and 14 to clarify that the term "path" describes **a possible routing path in the network,** and that the zone weight at each fault zone is an **indicator of the number of possible routing paths** that will traverse that fault zone, and **enables routing decisions independent of network traffic.** This finds support in page 6, lines 3-26 to page 7, lines 1-25 of the specification. No new matter has been added.
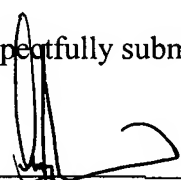
Hence, Applicant respectfully submits that independent claims 1, 4-6, and 14, as presently amended are in condition for allowance. Applicant also submits that claims 2-3, which depend upon claim 1, and claims 15-17, which depend upon claim 14, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

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CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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